

## WHAT IS CLAIMED IS

1. A fan comprising:
  - a casing having a bottom wall;
  - a shaft mounted inside the casing;
  - a rotary blade assembly comprising blades rotatably supported by the shaft inside the casing and above the bottom wall, the blade assembly being axially movable with respect to the shaft; and
  - a levitation device comprising first magnetic means mounted to the blades of the blade assembly and second magnetic means mounted in the bottom wall and opposing the first magnetic means, the second magnetic means being controllable to selectively generate a magnetic field that interacts with the first magnetic means to induce an expelling force acting upon the blade assembly for axially moving the blade assembly a predetermined distance away from the bottom wall.
2. The fan as claimed in Claim 1, wherein the second magnetic means is controllable to induce expelling force of different magnitudes to adjust the distance between the blade assembly and the bottom wall.